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TERMINAL (ENTER 1, 2, 3, OR ?):2

* * *	* *	* *	* *	* Welcome to STN International * * * * * * * * *
				Welcome to SIN International
NEWS	1			Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG	06	CAS REGISTRY enhanced with new experimental property tags
NEWS	3	AUG	06	FSTA enhanced with new thesaurus edition
NEWS	4	AUG	13	CA/CAplus enhanced with additional kind codes for granted
				patents
NEWS	5	AUG	20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS	6	AUG	27	Full-text patent databases enhanced with predefined
				patent family display formats from INPADOCDB
NEWS		AUG		USPATOLD now available on STN
NEWS	8	AUG	28	CAS REGISTRY enhanced with additional experimental
	_			spectral property data
NEWS	9	SEP	0.7	STN AnaVist, Version 2.0, now available with Derwent
NEWS	2.0	SEP	1.0	World Patents Index FORIS renamed to SOFIS
NEWS		SEP		INPADOCDB enhanced with monthly SDI frequency
NEWS		SEP		CA/CAplus enhanced with monthly SDI frequency
MEMP	12	JEE	1,	1967-1998
NEWS	13	SEP	17	CAplus coverage extended to include traditional medicine
				patents
NEWS		SEP		EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	15	OCT	02	CA/CAplus enhanced with pre-1907 records from Chemisches
NEWS	16	OCT	10	Zentralblatt BEILSTEIN updated with new compounds
NEWS		NOA		Derwent Indian patent publication number format enhanced
NEWS		NOV		WPIX enhanced with XML display format
NEWS		NOV		ICSD reloaded with enhancements
NEWS			04	LINPADOCDB now available on STN
NEWS			14	BEILSTEIN pricing structure to change
NEWS			17	USPATOLD added to additional database clusters
NEWS	23	DEC	17	IMSDRUGCONF removed from database clusters and STN
NEWS	24	DEC	17	DGENE now includes more than 10 million sequences
NEWS	25	DEC	17	TOXCENTER enhanced with 2008 MeSH vocabulary in
				MEDLINE segment
NEWS		DEC		MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS		DEC		CA/CAplus enhanced with new custom IPC display formats
NEWS	28	DEC	17	STN Viewer enhanced with full-text patent content
				from USPATOLD
NEWS		JAN		STN pricing information for 2008 now available
NEWS	30	JAN	16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	31	JAN	28	USPATFULL, USPAT2, and USPATOLD enhanced with new
				custom IPC display formats
NEWS		JAN		MARPAT searching enhanced
NEWS	33	JAN	28	USGENE now provides USPTO sequence data within 3 days
NEWS	3.4	JAN	28	of publication TOXCENTER enhanced with reloaded MEDLINE segment
MEMO	54	OM	20	TONOBETEN CHIMAICEU WITH LETOQUEU REDEFRE SEGMENT

NEWS 35 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements NEWS 36 FEB 08 STN Express, Version 8.3, now available

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3. AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2008

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NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

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=> file rea

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FULL ESTIMATED COST

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Uploading C:\Program Files\Stnexp\Queries\10518714b.str





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11 12 13 14 17 18 20 21 ring nodes:
1 2 3 4 5 6 8 chain bonds:
1 1-12 11-14 12-13 12-17 17-18 17-20 17-21 ring bonds:
1 1-2 16 1-8 2-3 3-4 4-5 5-6 11-12 11-14 12-13 17-18 17-20 17-21 exact bonds:
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1 4 17-20 17-21 exact bonds:
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1 6 17-20 17-21 exact bonds:
1 7 17-20 17-21 exact bonds:
1 7 17-20 17-21 exact bonds:
1 8 17-20 17-21 exact bonds:
1 9 17-20 17-20 exact bonds:
1 9 17-20 17-20 e
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G1:C,H

G2:C,H,OH

chain nodes :

G3:C,Cy

Match level :

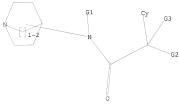
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### L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 C, H

G2 C, H, OH

G3 C, Cy

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 19:18:02 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 5748 TO ITERATE

34.8% PROCESSED 2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 110414 TO 119506
PROJECTED ANSWERS: 1 TO 158

L2 1 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 19:18:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 116546 TO ITERATE

100.0% PROCESSED 116546 ITERATIONS SEARCH TIME: 00.00.02 88 ANSWERS

1 ANSWERS

SEARCH 11ME: 00.00.02

L3 88 SEA SSS FUL L1

=> file caplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 178.36 178.57

FILE 'CAPLUS' ENTERED AT 19:18:12 ON 19 FEB 2008
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=> s 13 full L4 9 L3

=> d ibib abs hitstr tot

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:528114 CAPLUS DOCUMENT NUMBER: 143:259473

TITLE: A quantitative structure-activity relationship study on some Na+ and K+ channel blockers: Role of molecular

connectivity index

AUTHOR(S): Gupta, S. P.; Paleti, Anitha; Mekapati, S. B.;

Nagappa, A. N.; Kumaran, S. CORPORATE SOURCE: Birla Institute of Technology and Science, Pilani,

333031, India SOURCE: Letters in Drug Design & Discovery (2005), 2(4),

287-290

CODEN: LDDDAW; ISSN: 1570-1808

PUBLISHER: Bentham Science Publishers Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

A quant. structure-activity relation (QSAR) study is made on a series of Na+ channel blockers (diphenylacetamide derivs.) and on a series of K+ channel blockers (blockers of cardiac delayed rectifier potassium current IKs) (benzodiazepine derivs.). In both the cases, the blocking activity is significantly correlated with Kier's first-order valence mol.

connectivity index. 739310-56-6

RN

RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)

(QSAR study on Na+ and K+ channel blockers: role of mol. connectivity index)

739310-56-6 CAPLUS

CN Benzeneacetamide, N-1-azabicvclo[2.2.2]oct-3-v1-α-phenvl- (CA INDEX NAME)

NH-C-CHPh2

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:41467 CAPLUS

DOCUMENT NUMBER: 140:94180

TITLE: Preparation of new quinuclidine amide derivatives for

therapeutic uses as antagonists of M3 muscarinic

receptors

INVENTOR(S): Prat Quinones, Maria
PATENT ASSIGNEE(S): Almirall Prodesfarma S.A., Spain

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

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		FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	M	Ξ,	NL,	PT,	RO,	SE,	SI	, SK,	TR,
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										WO	20	03-	EP67	08		W :	20030	625
OTHER SO	THER SOURCE(S):					PAT	140:	94180	0									

GI

AB N-quinuclidinyl amides, such as I [R1 = H, alkyl; R3 = furyl, thienyl, phenyl; R4 = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkylmethyl, Ph,

II

benzyl, phenethyl, furyl, thienyl; R5 = H, OH, Me, CH2OHI, were prepared for use in therapy as antagonists of M3 muscarinic receptors. These amides are claimed for use in the treatment of respiratory, urol. or gastrointestinal pathol. conditions and diseases susceptible to amelioration by antagonism of M3 muscarinic receptors. Thus, amide II was prepared in 63.1% yield via an amidation reaction of (3R)-aminoquinucibing with 2-phenylhexanoic acid in DMF and CHC13. The prepared N-quinuclidinyl amides were assayed for human muscarinic receptor binding activity and for effect on bronchial response to i.v. acetylcholine challenge in guinea pigs. Tablet, liquid inhalant, powder inhalant, and inhalation aerosol pharmaceutical compns. of the amides were presented.

IT 644468-28-0P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of N-quinuclidinyl amides for use in pharmaceutical compns. as M3 muscarinic receptor antagonists)

RN 644468-28-0 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-α-hydroxy-α-2-thienyl- (CA INDEX NAME)

#### Absolute stereochemistry.

644468-21-3P 644468-24-6P 644468-26-8P

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644468-29-1P 644468-31-5P 644468-33-7P
644468-42-8P 644468-44-0P 644468-45-1P
644468-46-2P 644468-48-4P 644468-50-8P
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644468-60-0P 644468-61-1P 644468-62-2P
644468-63-3P 644468-64-4P 644468-65-5P
644468-66-6P 644468-67-7P 644468-68-8P
644468-69-9P 644468-70-2P 644468-86-0P
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644468-90-6P 644468-91-7P 644468-92-8P
644468-93-9P 644468-94-0P 644469-05-6P
644469-07-8P 644469-08-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
```

(preparation of N-quinuclidinyl amides for use in pharmaceutical compns. as  ${\tt M3}$  muscarinic receptor antagonists)

RN 644468-21-3 CAPLUS

CN Benzeneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-α-butyl- (CA INDEX NAME)

RN 644468-24-6 CAPLUS CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl- $\alpha$ -2-thienyl-(CA INDEX NAME)

Absolute stereochemistry.

RN 644468-26-8 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-y1- $\alpha$ -cyclopenty1- $\alpha$ -hydroxy-, ( $\alpha$ S)- (CA INDEX NAME)

Absolute stereochemistry.

RN 644468-29-1 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-5-bromo- $\alpha$ -(4-fluoro-3-methylphenyl)- $\alpha$ -hydroxy- (CA INDEX NAME)

- RN 644468-31-5 CAPLUS
- CN 2-Furanacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-y1-α-hydroxy-α-propyl- (CA INDEX NAME)

## Absolute stereochemistry.

- RN 644468-33-7 CAPLUS
- CN 2-Furanacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-y1- $\alpha$ -hydroxy- $\alpha$ -[2-(4-methoxyphenyl)ethyl]- (CA INDEX NAME)

#### Absolute stereochemistry.

- RN 644468-42-8 CAPLUS
- CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-[3-(3-hydroxyphenoxy)propyl]-, (3R)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

# Absolute stereochemistry.

CRN 14477-72-6 CMF C2 F3 O2

- RN 644468-44-0 CAPLUS
- CN 2-Thiopheneacetamide, N-1-azabicyclo[2.2.2]oct-3-yl- $\alpha$ -hydroxy- $\alpha$ -2-thienyl- (CA INDEX NAME)

- RN 644468-45-1 CAPLUS
- CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-methyl-, bromide (9CI) (CA INDEX NAME)

• Br-

RN 644468-46-2 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-[3-(3hydroxyphenoxy)propyl]-, bromide (9CI) (CA INDEX NAME)

● Br-

RN 644468-48-4 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacety1)amino]-1-methyl-, (3R)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 644468-47-3

CMF C18 H23 N2 O2 S2

CM 2

CRN 14477-72-6 CMF C2 F3 O2

RN 644468-50-8 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-(2-propenyl)-, (3R)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 644468-49-5 CMF C20 H25 N2 O2 S2

## Absolute stereochemistry.

CM 2

CRN 14477-72-6 CMF C2 F3 O2

CM 1

CRN 644468-51-9 CMF C24 H35 N2 O2 S2

Absolute stereochemistry.

CM :

CRN 14477-72-6 CMF C2 F3 O2

RN 644468-53-1 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-(3phenylpropyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

• Br-

RN 644468-55-3 CAPLUS
CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-[(2E)-3-phenyl-2-propenyl]-, (3R)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 644468-54-2 CMF C26 H29 N2 O2 S2

Absolute stereochemistry. Double bond geometry as shown.

CM 2

CRN 14477-72-6 CMF C2 F3 O2

RN 644468-56-4 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacety1)amino]-1-(2-phenoxyethy1)-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Br -

RN 644468-57-5 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-(3-phenoxypropyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 644468-59-7 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-[2-(phenylmethoxy)ethyl]-, (3R)-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 644468-58-6

CMF C26 H31 N2 O3 S2

CM 2

CRN 14477-72-6 CMF C2 F3 O2

RN 644468-60-0 CAPLUS CN 1-Azoniabicyclo[2.2.

N 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-[3-(2-thienyl)propyl]-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 644468-61-1 CAPLUS CN 2-Thiopheneacetamide, N-(3S)-1-azabicyclo[2.2.2]oct-3-yl- $\alpha$ -hydroxy- $\alpha$ -2-thienyl- (CA INDEX NAME)

- RN 644468-62-2 CAPLUS
- CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydi-2-thienylacetyl)amino]-1-(3-phenoxypropyl)-, bromide, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● Br-

- RN 644468-63-3 CAPLUS
- CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl- $\alpha$ -cyclopentyl- $\alpha$ -hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

- RN 644468-64-4 CAPLUS
- CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-y1-α-hydroxy-α-propy1- (CA INDEX NAME)

RN 644468-65-5 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-y1-α-ethyl-α-hydroxy-, (αR)- (CA INDEX NAME)

Absolute stereochemistry.

RN 644468-66-6 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-α-ethyl-α-hydroxy-, (αS)- (CA INDEX NAME)

Absolute stereochemistry.

RN 644468-67-7 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl- $\alpha$ -ethenyl- $\alpha$ -hydroxy-, ( $\alpha$ R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 644468-68-8 CAPLUS

CN 2-Thiopheneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl- $\alpha$ -ethenyl- $\alpha$ -hydroxy-, ( $\alpha$ S)- (CA INDEX NAME)

RN 644468-69-9 CAPLUS

CN Benzenepropanamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-α-phenyl-(CA INDEX NAME)

Absolute stereochemistry.

RN 644468-70-2 CAPLUS

CN Benzeneacetamide, N-(3R)-1-azabicyclo[2.2.2]oct-3-yl-α-cyclopentyl-α-hydroxy- (CA INDEX NAME)

Absolute stereochemistry.

RN 644468-86-0 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 1-[3-(2-benzothiazolyloxy)propyl]-3-[[2-(2-furanyl)-2-hydroxy-1-oxo-3-pentynyl]amino]-, chloride, (3R)- (9CI) (CA INDEX NAME)

● C1-

RN 644468-87-1 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[[2-(2-furany1)-2-hydroxy-1-oxo-3pentynyl]amino]-1-[3-(1-naphthalenyloxy)propyl]-, chloride, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

● c1-

RN 644468-88-2 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 1-[3-(1,3-benzodioxol-5-yloxy)propyl]-3-[[2-(2-furanyl)-2-hydroxy-1-oxo-3-pentynyl]amino]-, bromide, (3R)- (9CI) (CA INDEX NAME)

● Br-

RN 644468-89-3 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[[(2S)-cyclopentylhydroxy-2-thienylacetyl]amino]-1-(4,4,4-trifluorobutyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 644468-90-6 CAPLUS CN 1-Azoniabicyclo[2.2

1-Azoniabicyclo[2.2.2]octane, 3-[[(28)-cyclopentylhydroxy-2-thienylacetyl]amino]-1-(2-hydroxyethyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

• Br-

RN 644468-91-7 CAPLUS
CN 1-Azoniabicyclo[2.2.2]octane, 1-[4-(acetyloxy)butyl]-3-[[(5-bromo-2-thienyl)(4-fluoro-3-methylphenyl)hydroxyacetyl]amino]-, bromide, (3R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

• Br-

RN 644468-92-8 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[[(5-bromo-2-thieny1)(4-fluoro-3-methylphenyl)hydroxyacetyl]amino]-1-(5-ethoxy-5-oxopentyl)-, bromide, (3R)- (9C1) (CA INDEX NAME)

■ Br =

RN 644468-93-9 CAPLUS
CN 1-Azoniabicyclo[2.2.

1-Azoniabicyclo[2.2.2]octane, 1-(3-cyanopropyl)-3-[[2-hydroxy-4-(4-methoxyphenyl)-1-oxo-2-(2-thienyl)butyl]amino]-, bromide, (3R)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

RN 644468-94-0 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 1-[2-(1,3-benzodioxol-2-yl)ethyl]-3-[[2-hydroxy-4-(4-methoxyphenyl)-1-oxo-2-(2-thienyl)butyl]amino]-, bromide, (3R)- (9CI) (CA INDEX NAME)

RN 644469-05-6 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[[(2S)-cyclopentylhydroxy-2thienylacetyl]amino]-1-(2-ethoxyethyl)-, (3R)-, formate (salt) (9CI) (CA INDEX NAME)

CM :

CRN 644469-04-5 CMF C22 H35 N2 O3 S

Absolute stereochemistry.

CM 2

CRN 71-47-6 CMF C H O2

O== CH-O-

RN 644469-07-8 CAPLUS

N 1-Azoniabicyclo[2.2.2]octane, 1-[3-(acetylthio)propyl]-3-[[(5-bromo-2-thienyl)(4-fluoro-3-methylphenyl)hydroxyacetyl]amino]-, (3R)-, formate (sait) (9CI) (CA INDEX NAME)

CM 1

CRN 644469-06-7

CMF C25 H31 Br F N2 O3 S2

### Absolute stereochemistry.

CM 2

CRN 71-47-6 CMF C H O2

O== CH-O-

RN 644469-08-9 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(di-2-thienylacetyl)amino]-1-(3-phenoxypropyl)-, bromide, (3R)- (9CI) (CA INDEX NAME)

## Absolute stereochemistry.

Br -

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:8644 CAPLUS

DOCUMENT NUMBER: 128:102011

TITLE: Preparation of pyridylacetamides as anticholinergics for treatment of pollakiuria and urinary incontinence

INVENTOR(S): Taniguchi, Kiyoshi; Tsubaki, Kazunori

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09328469	A	19971222		19970310
PRIORITY APPLN. INFO.:			AU 1996-8629 A	19960313
OTHER SOURCE(S):	MARPAT	128:102011		

.

TT

T/

AB RZCRIR3CONR10(A)nR4 (I; R1, R2 = aryl; R3 = OH, halo; R4 = II, III, IV; B = N, NR54-X; C = NR6, NR788-Y-; R5 = lower alkyl, imino-protecting group; X-, Y-, Z- = anion; R6 = H, lower alkyl, imino-protecting group; doted line = optional single bond; R7, R8, R9 = lower alkyl; R10 = H, lower alkyl, A = lower alkylene; n = 0, 1; if R10 = H, then II (B = N or NR5+X-) or III (C = NR6) is bonded at 3-position) and their pharmaceutically acceptable salts are prepared 2-Hydroxy-N-methyl-2, Z-diphenyl-N-[(1,2,3,6-tetrahydro-1-(4-methoxybenzyl)-4-pyridyl]methyl]acetamide (1.60 g) was deprotected using CIOCOECCLEM in CICHECHECI-MeOH under reflux for 50 min and reacted with HCl in AcOEt to give 695 mg I (R1 = R2 = Ph, R3 = OH, R10 = Me, R4 = 1,2,3,6-tetrahydro-4-pyridyl, A = CH2, n = 1) (V). V showed ED30 of 0.0056 mg/kg in inhibition of urinary bladder contractions in rats.

IT 201340-53-6P 201340-54-7P 201340-55-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyridylacetamides as anticholinergics for treatment of pollakiuria and urinary incontinence)

RN 201340-53-6 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydiphenylacetyl)amino]-1-methyl-, iodide (9CI) (CA INDEX NAME)

• I-

RN 201340-54-7 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydiphenylacetyl)amino]-1-methyl-, bromide, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Br-

RN 201340-55-8 CAPLUS

CN 1-Azoniabicyclo[2.2.2]octane, 3-[(hydroxydiphenylacety1)amino]-1-methyl-, bromide, (R)- (9CI) (CA INDEX NAME)

• Br-

IT 201340-52-5

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of pyridylacetamides as anticholinergics for treatment of pollakiuria and urinary incontinence)

RN 201340-52-5 CAPLUS

CN Benzeneacetamide, N-1-azabicyclo[2.2.2]oct-3-yl-a-hydroxy-a-phenyl- (CA INDEX NAME)

IT 201340-42-3P 201340-43-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyridylacetamides as anticholinergics for treatment of pollakiuria and urinary incontinence)

RN 201340-42-3 CAPLUS

CN Benzeneacetamide, N-1-azabicyclo[2.2.2]oct-3-yl-α-hydroxy-α-phenyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 201340-43-4 CAPLUS

CN Benzeneacetamide, N-1-azabicyclo[2.2.2]oct-3-y1- $\alpha$ -hydroxy- $\alpha$ -phenyl-, (R)- (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1997:576686 CAPLUS

DOCUMENT NUMBER: 127:234215

TITLE: Preparation of non-peptidyl vasopressin Vla receptor

antagonists
INVENTOR(S): Bruns, Robert F., Jr.; Cooper, Robin D. G.; Dressman,

Bruce A.; Hunden, David C.; Kaldor, Stephen W.; Koppel, Gary A.; Rizzo, John R.; Skelton, Jeffrey

James; et al.

PATENT ASSIGNEE(S): Eli Lilly and Co., USA; Bruns, Robert F., Jr.; Cooper,

Robin D. G.; Dressman, Bruce A.; Hunden, David C.; Kaldor, Stephen W.; Koppel, Gary A.

SOURCE: PCT Int. Appl., 158 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 9730707	A1 19970828	WO 1997-US3039	19970220			
		BG, BR, BY, CA, CH,				
DK, EE, ES	, FI, GB, GE, HU,	IL, IS, JP, KE, KG,	KP, KR, KZ, LC,			
		MK, MN, MW, MX, NO,				
		TM, TR, TT, UA, UG,				
		BE, CH, DE, DK, ES,				
IE, IT, LU	, MC, NL, PT, SE,	BF, BJ, CF, CG, CI,	CM, GA, GN, ML,			
MR, NE, SN	, TD, TG					
CA 2246753	A1 19970828	CA 1997-2246753	19970220			
CA 2246753	C 20050510					
AU 9719779	A 19970910	AU 1997-19779	19970220			
EP 939632	A1 19990908	EP 1997-907895	19970220			
EP 939632	B1 20051005	CA 1997-2246753 AU 1997-19779 EP 1997-907895				
R: AT, BE, CH	, DE, DK, ES, FR,	GB, GR, IT, LI, NL,	SE, PT, IE, FI			
JP 2000504731	T 20000418	JP 1997-529647 AT 1997-907895	19970220			
AT 305781	T 20051015	AT 1997-907895	19970220			
ES 2248840	T3 20060316	ES 1997-907895	19970220			
US 6204260	B1 20010320	US 1999-125737 US 2000-733430	19990819			
US 2002049187	A1 20020425	US 2000-733430	20001208			
US 6521611	B2 20030218					
US 6610680	B1 20030826	US 2002-327240	20021220			
PRIORITY APPLN. INFO.:		US 2002-327240 US 1996-12149P	P 19960223			
		US 1996-12188P	P 19960223			
		US 1996-12215P	P 19960223			
		GB 1996-5044 GB 1996-5045 GB 1996-5046	A 19960309			
		GB 1996-5045	A 19960309			
		GB 1996-5046	A 19960309			
		WO 1997-US3039	W 19970220			
		US 1999-125737				
		US 2000-733430	A3 20001208			
OTHER SOURCE(S):	MARPAT 127:2342	1.5				

OTHER SOURCE(S): MARPAT 127:234215

GI

- AB Azetidinones I [R1 = H, alkyl, carbamoyl, alkoxy, acyl, benzoyl, phenyl; R2 = H, OH, alkyl; R3 = phthalimido, azido, phenoxyacetamido, oxazolinyl, imidazolinyl, pyrrolidinyl, ureido; Q = O, S, NR5; X = H, alkyl; R5 = H, alkyl, OH, alkoxycarbonyl, benzyl) were prepared for use as vasopressin Vla receptor antagonists. Thus, azetidinone II was prepared starting from L-leucine benzyl ester, cinnamaldehyde, and 2-[4(S)-phenyloxazolidin-2-on-3-yl]acetyl chloride. II gave an IC50 value of 39 nM when tested for vasopressin Vla receptor binding affinity.
- IT 195309-73-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
- (preparation of non-peptidyl vasopressin Vla receptor antagonists) RN
- 195309-73-0 CAPLUS
- CN 1-Azetidineacetamide, N-1-azabicyclo[2.2.2]oct-2-yl- $\alpha$ -(2-ethyl-1,3dioxolan-2-v1)-2-oxo-3-(2-oxo-4-phenyl-3-oxazolidinyl)-4-(2-phenylethenyl)-, [3S-[3α(R\*), 4α(E)]]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:6185 CAPLUS

DOCUMENT NUMBER: 122:81073

TITLE: Agents for the treatment of overactive detrusor. VI.
Synthesis and pharmacological properties of acetamide
derivatives bearing cyclic amines in N-substituents

AUTHOR(S): Taniguchi, Kiyoshi; Tsubaki, Kazunori; Mizuno,

Hiroaki; Take, Kazuhiko; Okumura, Kazuo; Terai, Takao;

Shiokawa, Youichi

CORPORATE SOURCE: New Drug. Res. Lab., Fujisawa Pharm. Co., Ltd., Osaka,

532, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (1994), 42(1),

I

74-84

CODEN: CPBTAL; ISSN: 0009-2363

DOCUMENT TYPE: Journal LANGUAGE: English

GT

AR With the aim of improving the efficacy and decreasing the efficacy and decreasing the side effects of oxybutynin, N-[(tetrahydro-3pyridyl)methyl]- or N-[(tetrahydro-4-pyridyl)methyl]-, N-(4-piperidyl)-, and N-(3-piperidylalkyl)- or N-(4-piperidylalkyl)-2-hydroxyacetamides (such as) I (X = H, halo, etc.; R1 = cyclohexyl, Ph, etc.; R4 = H, alkyl, etc.) and related carboxamides were prepared and evaluated for inhibitory activity against urinary bladder rhythmic contraction in rats and for mydriatic activity in rats. Some of these compds. were superior to oxybutynin in both inhibitory activity against bladder contraction and selectivity between inhibitory activity against bladder contraction and mydriatic activity. Judging from the effect of I (X = H, R1 = Ph, R4 = H) on detrusor contraction in vivo in guinea-pigs, it appeared that the inhibitory activity of I against bladder contraction in vivo was related mainly to its inhibitory activity against detrusor contraction in vitro induced with carbacol (antimuscarine-like activity). The selectivity (20-fold) of I between inhibitory activity against bladder contraction and mydriatic activity was greatly superior to that (0.48-fold) of oxybutynin. Compound I was prepared by debenzylation of the corresponding N-[[1-(4-methoxybenzyl)-tetrahydro-4-pyridyl]methyl] derivative

IT 153196-23-7P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, for treatment of urinary frequency or incontinence)

RN 153196-23-7 CAPLUS

Benzeneacetamide, N-1-azabicyclo[2.2.2]oct-3-yl-α-hydroxy-αphenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:163981 CAPLUS

DOCUMENT NUMBER: 120:163981

TITLE: Preparation of substituted acetamides for treatment of

bladder disorders

INVENTOR(S): Shiokawa, Youichi; Taniguchi, Kiyoshi; Take, Kazuhiko;

Tsubaki, Kazunori; Mizuno, Hiroaki

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9316048 A1 19930819 WO 1993-JP142 19930204
W: CA, JP, KR, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRIORITY APPLN. INFO::

OTHER SOURCE(S):

MARPAT 120:163981

OTHER SOURCE(S): MAR GI

AB Title compds. RIR2R3C(Al)mcONH(A2)nR4 [I; R1, R2 = (un)substituted aryl; R3 = H, OH, alkyl; R4 = Q, Q1, Q2, Q3; R5 = Me, Et, Pr, iso-Pr, protecting group; R6 = alkyl; R7 = alkyl, protecting group; Al, A2 = alkylene; m, n = 0, 1; with provisos] are prepared HOCPh2CONHCH2Q4 [Q4 = 4-pyridyl] (preparation

garation given) was treated with p-MeOC6H4CH2Cl to give the quaternary ammonium compound II, which was reduced with NaBH4 in MeOH and the resulting tetrahydropyrinde derivative III was refluxed with ClOC2CHCIMe in CH2Cl2 to give, after treatment with 4M HCl, the title compound I.HCl [Rl = R2 = Ph, R3 = OH, Al = bond, A2 = CH2, R4 = 1,2,3,4-tetrahydro-4-pyridyl]. The tested I had an IC30 of 0.005 mg/Kg s.c. in controlling bladder contraction in rats.

IT 153196-23-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for treatment of bladder disorders)

RN 153196-23-7 CAPLUS

CN Benzeneacetamide, N-1-azabicyclo[2.2.2]oct-3-y1-\alpha-hydroxy-\alpha-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:106123 CAPLUS

DOCUMENT NUMBER: 116:106123

TITLE: 3-(N-substituted-amino) quinuclidines and preparation of optically active 3-aminoquinuclidine therefrom

INVENTOR(S): Kawakita, Takeshi; Sano, Mitsuharu; Kuroita, Takanobu;

Ikezawa, Ryuhei

PATENT ASSIGNEE(S): Yoshitomi Pharmaceutical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03218376	A	19910925		19901113 19891114
PRIORITY APPLN. INFO.:			JP 1989-296938 AI	19891114
OTHER SOURCE(S):	MARPAT	116:106123		
GI For diagram(s), see	printe	d CA Issue.		

3-Aminoquinuclidines I (R = N-protected amino acid residue) (II) and optically active II and a process for the preparation of optically active I (R

=  $|\mathbf{H}|$  (III) by treatment of optically active N-protected amino acids with racemic III, followed by separation of the resultant disatereomeric II and hydrolysis. (S)- $\alpha$ -Tosylphenylalanine in CHC13 was treated with SCC12 under reflux for 45 min and the resultant acid chloride in CHC13 was treated with (±)-III at room temperature for 30 min to give (S,5)-II.HC1 (R =  $\alpha$ -tosylphenylalnyl). This was treated with H2SO4 under reflux for 4 ht o give (S)-(-)-III.

T 139092-89-0P RL: RCT (Reactant); SPN (Synthetic

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and decomposition of)

RN 139092-89-0 CAPLUS

CN 2H-Isoindole-2-acetamide, N-1-azabicyclo[2.2.2]oct-3-yl-1,3-dihydro-1,3dioxo-a-(phenylmethyl)-, monohydrochloride, [S-(R\*,S\*)]- (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:546358 CAPLUS DOCUMENT NUMBER: 79:146358

ORIGINAL REFERENCE NO.: 79:23717a,23720a

TITLE: Synthesis and pharmacological study of 3-hydroxy- and

3-aminoquinuclidine derivatives

Mikhlina, E. E.; Zaitseva, K. A.; Vorob'eva, V. Ya.; AUTHOR(S):

Mashkovskii, M. D.; Yakhontov, L. N.

CORPORATE SOURCE: Vses. Nauchno-Issled. Khim.-Farm. Inst. im.

Ordzhonikidze, Moscow, USSR SOURCE: Khimiko-Farmatsevticheskii Zhurnal (1973), 7(8), 20-4

CODEN: KHFZAN; ISSN: 0023-1134

DOCUMENT TYPE: Journal LANGUAGE: Russian

GT For diagram(s), see printed CA Issue.

AB 3-Hydroxyquinuclidine reacted with 2,3,4-RR1R2C6H2COC1 (R = HO, NO2, Me,

Cl, Br, H; R1 = H, Me; R2 = H, Cl, Me) (8 compds.) to give the corresponding (benzoyloxy)quinuclidines I. N-Quinuclidinyl amides II (R3 = 4-02NC6H4, PhCH2, PhCH2CH2, Ph2CH, 4-C1C6H4OCH2, 2,4-C12C6H3) were prepared by condensation of 3-aminoquinuclidine with R3COC1. 3-Oxoquinoline reacted with HOCH2CH2NH2 and was then hydrogenated to give (ethylamino)quinuclidine III (R = H; R1 = HO), which underwent methylation and then chlorination to give III (R = Me; R1 = C1). The latter reacted with morpholine and 1-methylpiperazine to give III (R = Me; R1 = morpholino, 4-methyl-1-piperazinyl). Cyanoethylation of

3-(methylamino)quinuclidine yielded III (R = Me, R1 = CN). Amides II possessed narcotic, nerve center blocking, and hypotensive activity.

50684-14-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation, nerve center blocking and hypotensive activity of)

RN 50684-14-5 CAPLUS

CN Benzeneacetamide, N-1-azabicyclo[2.2.2]oct-3-yl-α-phenyl-, monohydrochloride (9CI) (CA INDEX NAME)

HC1

L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1954:35976 CAPLUS 48:35976

DOCUMENT NUMBER:

ORIGINAL REFERENCE NO.: 48:6438f-i,6439a-d

TITLE: Antispasmodics, II. Esters of basic bicyclic alcohols

AUTHOR(S): Sternbach, L. H.; Kaiser, S. CORPORATE SOURCE: Hoffmann-La Roche, Nutley, NJ

SOURCE: Journal of the American Chemical Society (1952), 74,

2219-21

CODEN: JACSAT: ISSN: 0002-7863

DOCUMENT TYPE: Journal Unavailable

LANGUAGE:

GI For diagram(s), see printed CA Issue.

The 7 basic alcs., 3-quinuclidinol (I), 2-benzyl-3-quinuclidinol (II), 1-azabil cyclo[3.2.1]-6-octanol (III), 1-azabicyclo[3.3.1]-4-nonano-(IV), 1-azabicyclo[3.3.1]-2-methyl-4-nonanol (V), and octahydro-1-pyrrocolinol (VI), were esterified with Ph2CHCO2H (VII), and I and III with other related acids. Of the 17 compds. prepared (see below), 5 showed an antiacetylcholine activity equaling or surpassing that of atropine. Of the 2 enantiomorphic 3-diphenylacetyl quinuclidines derived from the optical antipodes of I, the 1-isomer has the most antiacetylcholine activity, while the d-isomer shows very low potency; the toxicities of both isomers are equal. Other relationships between structure and activity are discussed. Preparation of esters. Procedure A: The acid chloride and alc. (0.05 mole each) in 300 cc. C6H6 refluxed 15 hrs., and the product held 24 hrs. at 5°, then filtered yielded the ester. Procedure B: The acid chloride and alc. (or diamine) in 300 cc. C6H6 were refluxed 15 hrs., the product was cooled, acidified with ice-cold HCl, the aqueous solution washed with C6H6 or Et2O, the base liberated with ice-cold alkali, and extracted with Et20. Procedure C: The basic alc. was refluxed with Na in 50 cc. PhMe 2-4 hrs., the alcoholate cooled with ice, treated with Ph2CClCOCl in 20-40 cc. PhMe, the mixture stirred 1 hr. at room temperature,

treated with iso-PrOH, 120 cc. N HCl added, the mixture refluxed 10 min., the aqueous phase made alkaline and extracted with Et20 or CH3Cl. Procedure D: Preparation

of salts of the basic esters. A cold alc. solution of the ester was neutralized with the dilute acid. Procedure E: Mixture of tropic and atropic esters of I. Acetyltropyl chloride (from 3.32 q. of tropic acid) in 10 cc. C6H6 added to 2.6 g. I in 100 cc. C6H6, the mixture let stand 14 hrs. at room temperature, heated 2 hrs. at 50°, cooled, extracted with ice-cold dilute HCl, the aqueous solution made alkaline, the ester extracted with Et20, the Et20 solution

concentrated in vacuo, the residue in N alc. titrated with N NaOH (phenolphthalein) at 30-45°, the mixture diluted with water, extracted with Et20, and the extract concentrated in vacuo to yield 2 g. of oil. Procedure F: Equivalent amts. of Ph2C(CH2CH:CH2)COC1 (VIII) and Et2NCH2CH2Cl were refluxed 20 hrs. and the product isolated by procedures B and D. Procedure G: The mixture of esters from d- and dl-I with VII was resolved by fractional crystallization from petr. ether to give the d-ester,  $[\alpha]25D$  10.5° (c 3.3, 0.5N HCl); m.p. not depressed by mixture with the racemate. Procedure H: Free VI (from the picrate, cf. part I) was esterified by procedure B. Base, Acid, Procedure, % Yield, M.p. °C., Activity(atropine = 1); I, VII, B, 86, 95-6, ; I, VII-sulfate, D, , 95-103, 1; 1-I, VII, B, 80, 89-90, 2; d-I, VII, G + B, , 89-90, 1/12; I, Benzilic, C, 40-60, 164-5, ; I, Benzilic-HCl, D, , 239-41, 2; I, 9-Fluorenecarboxylic-HCl (IX), A, 90, 201-5, 2; I, Tropic + atropic, E, 40, 0il, 1/2; I, VIII, C + D, 50, 185-91, 1/25-1/50; (a), VIII, F, 50, 108-10, 1/500; II, VII, A, 50, 250-2, 1/40-1/25; III, VII, A, 80, 191-2, 1/2; III, IX, A, 84, 212-20, 1; IV, VII, A, 88, 214-16, 1/10; V, VII, A, 92, 188-90, 1/5-1/10; VI, VII, H, , 64-6, 1/100; (b), VII, B, , 177-9, <1/100; (a) EXDORGACHOM. (b) 3-Aminoquinuclidine.

- IT 860503-38-4P, Quinuclidine, 3-(2,2-diphenylacetamido)RL: PREP (Preparation)
  (preparation of)
- RN 860503-38-4 CAPLUS
- CN Quinuclidine, 3-(2,2-diphenylacetamido)- (5CI) (CA INDEX NAME)

NH-C-CHPh2

(FILE 'HOME' ENTERED AT 19:17:35 ON 19 FEB 2008)

FILE 'REGISTRY' ENTERED AT 19:17:45 ON 19 FEB 2008

STRUCTURE UPLOADED

L2 1 S L1

L3 88 S L1 FULL

FILE 'CAPLUS' ENTERED AT 19:18:12 ON 19 FEB 2008 9 S L3 FULL L4

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